IN THE CLAIMS

1. (Currently Amended) A catalyst for the full oxidation of volatile organic compounds (VOC) and of CO to CO_2, comprising :

a non-stoichiometric crystalline compound conventionally designated by a formula which corresponds to $A_{14}Cu_{24}O_{41}$ (I), where A is Sr or a solid solution of Sr with alkaline-earth metals, alkaline metals or lanthanides; or a non-stoichiometric crystalline compound conventionally designated by a formula which corresponds to $B_4Cu_5O_{10}$ (II), where B is Ca or a solid solution of Ca with alkaline-earth metals, alkaline metals or lanthanides; or mixtures thereof; that is prepared in a form which has a large specific surface area, preferably larger than 25 m^2/g.

2. (Original) The catalyst according to claim 1, further comprising a substrate material.

3. (Original) The catalyst according to claim 2, wherein the substrate material is a porous inert material.

4. (Currently Amended) The catalyst according to claim 3, wherein said porous inert substrate comprises a material chosen from the group consisting of $A1_2O_3$, ZrO_2, CeO_2, TiO_2, and MgO.

5. (Original) The catalyst according to claim 1, in form of granules.

6. (Original) The catalyst according to claim 2, wherein said substrate is an inert substrate in the form of a thin film.

7. (Original) The catalyst according to claim 2, wherein said substrate is a composite material.

8. (Currently Amended) The catalyst according to claim 1, comprising 5% to 20% by weight of a non-stoichiometric crystalline compound conventionally designated by a formula which corresponds to $A_{14}Cu_{24}O_{41}$ (I), where A is Sr or a solid solution of Sr with alkaline-earth metals, alkaline metals or lanthanides; or a non-stoichiometric crystalline compound conventionally designated by a formula which corresponds to $B_4Cu_5O_{10}$ (II),,

where B is Ca or a solid solution of Ca with alkaline-earth metals, alkaline metals or lanthanides; or mixtures thereof.

9. (Cancelled)

10. (Cancelled)

11. (Currently Amended) A method for preparing a catalyst comprising a non-stoichiometric crystalline compound conventionally designated by a formula which corresponds to $Sr_{14}Cu_{24}O_{41}$ comprising the steps of:

a) immersing a pre-dried granular porous substrate material in an aqueous solution with a molar concentration of $Sr(NO_3)_2$ from 0.23 M to 0.93 M and a molar concentration of $Cu(NO_3)_2$ from 0.39 M to 1.59 M;

b) drying the product of step a) at a temperature from 80°C to 120°C; and

c) holding the product of step b) at a temperature from 650°C to 750°C in a gas stream which contains oxygen until complete decomposition of the nitrates occurs.

12. (Currently Amended) A method for preparing a catalyst comprising a non-stoichiometric crystalline compound conventionally designated by a formula which corresponds to $Ca_4Cu_5O_{10}$ comprising the steps of:

a) immersing a pre-dried granular porous substrate material in an aqueous solution of $Ca(NO_3)_2$ and $Cu(NO_3)_2$ in an equimolar ratio and at a molar concentration from 0.39 M to 1.39 M;

b) drying the product of step a) at a temperature from 80°C to 120°C; and

c) holding the product of step b) at a temperature from 650°C to 750°C in a gas stream which contains oxygen until complete decomposition of the nitrates occurs.

13. (Original) A method for preparing a catalyst comprising a non-stoichiometric crystalline compound conventionally designated by a formula which corresponds to $Ca_4Cu_5O_{10}$, comprising the steps of:

a) immersing a pre-dried granular porous substrate material in an aqueous solution

obtained by dissolving, with the application of heat, CuO and $CaCO_3$ in nitric acid, so that the molar ratio between the components of the solution is CuO : $CaCO_3$: HNO_3 = 1 : 0.83 : 3.2; water and citric acid being added thereto so that the citric acid : Cu molar ratio is from 3.5:1 to 4.0:1;

b) heating the product of step a) in air until combustion of the organic fraction of the absorbed material is achieved; and

c) thermal treating the product of step b) for 4 to 24 hours at a temperature from 650 to 750°C in a stream of gas containing oxygen.

14. (Currently Amended) The method according to claim 11, wherein the porous material is selected from the group consisting of $A1_2O_3$, ZrO_2, CeO_2, TiO_2, and MgO.